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APPLICATION NO.	FILING DATE	FID 200			
		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/544,423	04/06/2000	Daniel Joseph Ondrus	200-0500	7482	
32996	7590 11/03/2004		EXAMINER		
CITKOWSKI	GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI, PC			KOCH, GEORGE R	
280 N. OLD WOODWARD AVE., STE. 400 BIRMINGHAM, MI 48009		ART UNIT	PAPER NUMBER		

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		09/544,423				
	Office Action Summary	Examiner	ONDRUS, DANIEL JOSEPH			
	•		Art Unit			
ļ	The MAILING DATE of this communication app	George R. Koch III	1734			
Period fo	or Reply	ours on the cover sheet t	with the correspondence address			
- Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period wire to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a within the statutory minimum of the vill apply and will expire SIX (6) MO	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication.			
Status	•					
1) 🛛	Responsive to communication(s) filed on 16 Au	ugust 2004				
	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.I	D. 11, 453 O.G. 213.			
Dispositi	on of Claims					
l		ing in the country of				
	Claim(s) <u>23,25,26,31,33,34 and 36</u> is/are pend 4a) Of the above claim(s) is/are withdraw					
5)	Claim(s) is/are allowed.	withom consideration.				
1	Claim(s) <u>23,25,26,31,33,34 and 36</u> is/are reject	ed.				
	Claim(s) is/are objected to.	.cu.				
	Claim(s) are subject to restriction and/or	election requirement				
	on Papers	an a				
	The specification is objected to by the Examiner					
	The drawing(s) filed on is/are: a) ☐ acce		by the Evenines			
,	Applicant may not request that any objection to the d	rawing(s) he held in above	by the Examiner.			
	Replacement drawing sheet(s) including the correction	on is required if the drawing	(s) is objected to See 37 CER 4 404 (s)			
11) 🔲 🛭	The oath or declaration is objected to by the Exa	aminer. Note the attached	Office Action or form PTO 152			
	nder 35 U.S.C. § 119		2 5 11 5 7 5 10 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
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12)LJ 7	Acknowledgment is made of a claim for foreign p ☐ All  b)	priority under 35 U.S.C. §	119(a)-(d) or (f).			
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	= Proposition of the priority documents					
	<ul><li>2. Certified copies of the priority documents</li><li>3. Copies of the certified copies of the priorit</li></ul>	nave been received in A	pplication No			
·	application from the International Bureau	(PCT Rule 17 2(a))	received in this National Stage			
* Se	ee the attached detailed Office action for a list o		received			
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Attachmor*	٥١					
Attachment(:	s) of References Cited (PTO-892)	<b></b> -	(27)			
2) Notice	of Draftsperson's Patent Drawing Review (PTO-948)	4) 💹 Interview S Paper No(s	ummary (PTO-413) /Mail Date			
3) L Informa	ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) L Notice of In	formal Patent Application (PTO-152)			
S. Patent and Trac	No(s)/Mail Date	6)				
TOL-326 (Rev		on Summary	Part of Paper No./Mail Date 20041101			

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#### **DETAILED ACTION**

#### Response to Arguments

1. In view of the appeal brief filed on 8/16/2004, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
  - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

## Claim Rejections - 35 USC § 102

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 23, 25, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kehr (US Patent 3,660,217).

Kehr discloses a method of repetitively form a joint (as represented by each glue line and each layer) between two members (for example, 24b and 24c) during a manufacturing process using a viscous adhesive (see description of adhesive properties in columns 2-5), the method comprising the steps of positioning a first member to be in

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contact with a second member (24b and 24c, for example) to form a coach joi8nt (see Figure 3) during a manufacturing process, wherein the joint is defined by both a coverage portion extending along the first member and a fill portion adjacent the coverage portion and extending along the first member (these are considered inherent properties for all coach/lap joints), and depositing the viscous adhesive along up to fifty percent of the coverage portion and up to ten percent of the fill portion (as shown by the fact that the glue lines only cover substantially below fifty percent of the area) to repetitively form the joint between the first member with the second member during the manufacturing process, so that the seepage of the adhesive from the joint is a minimum while the stress transfer of the joint is a maximum (inherent properties).

As to claim 25, Kehr discloses full coach joints (see Figure 3).

As to claim 31, Kehr discloses a method of repetitively (represented by each glue line and each layer) forming a joint between two members (for example, layers 24b and 24c) during a manufacturing process using a viscous adhesive, the method comprising the steps of positioning a first member (24b) having an arcuate portion (shown in Figure 3) to be in contact with a second member to form a coach joint during the manufacturing process, wherein the joint is defined by both a coverage portion extending along the first member from a first point at a first end of the first member to a second point at which the first member begins to curve to form a tangent portion, and a flange fill portion extending from the second point to a line segment that is collinear to the tangent portion (the definition of the joint is inherent to the coach joint), and depositing the viscous

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adhesive along up to fifty percent of the coverage portion and up to ten percent of the fill portion to repetitively form the joint between the first member with the second member during the manufacturing process (as shown by the fact that the glue lines only cover substantially below fifty percent of the area), so that seepage of the adhesive from the joint is a minimum while stress transfer is a maximum (inherent properties).

As to claim 33, Kehr discloses full coach joints (see Figure 3).

4. Claim 36 is rejected under 35 U.S.C. 102(b) as being anticipated by Kunz (US Patent 4,803,124).

As to claim 36, Kunz discloses a method of repetitively forming a lap joint (see Figure 6 and 5) between two members using a viscous adhesive during a manufacturing process, the method comprising the steps of positioning a first planar member (item 41) to overlap a second generally planar member (item 49) to form a lap joint during the manufacturing process, wherein the joint includes a coverage portion defined by a length of overlap between the first member and the second member, and depositing the viscous adhesive (starfish 21) at a center point for the coverage length and applying the adhesive between fifty to seventy five percent of the coverage portage, so that it is equidistant from the center point, to repetitively interconnect the first member and the second member for each joint during the manufacturing process, so that seepage of the adhesive from the joint is a minimum value while stress transfer of the joint is a maximum. The difference between the coverage length in Figure 5 and the overlap length in Figure 6 is between 50 to 75 percent, especially at the inward portions

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of the starfish pattern. Furthermore, since Kunz is directed towards bonding of semiconductor "chips", emphasis plural, each chip bonded is considered a repeated bonding operation in a manufacturing process.

### Claim Rejections - 35 USC § 103

5. Claims 26, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerhr as applied to claims 23 and 31 above, and further in view of Adhesives Handbook, (pages 1-19, 28-31, 40-43 and 94).

Kehr discloses all of the limitations of claims 23 and 31.

As to claims 26 and 34, Kehr discloses full coach joints, but does not disclose one half coach joints.

However, as to claims 25 and 34, Adhesives Handbook discloses many well-known joints, including one half coach joints as in claim 26 and 34 (see page 11, and page 12, top row, third and fourth figure) and full coach joints as in claims 25 and 33 (for example, see page 12, top row, third and fourth figure). One in the art would appreciate that all of these joints are well known, have certain favorable loading and manufacturing characteristics (see Adhesives Handbook, pages 8, 18 and 19), and would utilize routine experimentation such as a stress analysis as disclosed in Adhesives Handbook to determine the appropriate joint. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the claimed joints

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disclosed in Adhesives Handbook in order to achieve proper stress handling characteristics.

## Response to Arguments

6. Applicant's arguments with respect to claims 23, 25, 26, 31, 33, 34 and 36 have been considered but are moot in view of the new ground(s) of rejection. Kehr has been applied in response to arguments as to lack of repetitiveness, and failure to disclose reduced coverage areas, with respect to coach joints and one half coach joints. Kunz Kehr has been applied in response to arguments as to lack of repetiveness, and failure to disclose reduced coverage areas, with respect to lap joints.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George R. Koch III Patent Examiner Art Unit 1734

George R. Koch III 11/01/2004

> CHRIS FIORILLA SUPERVISORY PATENT EXAMINER

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